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Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/WNo.17/SKK/WMM/Gradation/2014-15

16.04.2016

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Yeshwanthapura Sub Division, BBMP, Bangalore.

Agency : **Mr. Shivakumar K,** Contractor, Bangalore.

Name of Work : Providing and laying HDPE Water line In Mutyala Nagar Block-4 in J.P Park, Ward No. 17, BBMP, Bangalore.

Reference : EE/RRND/Wo. No./232/2013-14 Dated: 07.02.2014

Date of Testing : 16.04.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): 27473

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	949	949	3.5	96.5	95-100
22.4	7239	8188	29.8	70.2	60-80
11.2	5490	13678	49.8	50.2	40-60
4.75	4023	17701	64.4	35.6	25-40
2.36	3479	21180	77.1	22.9	15-30
0.600	2312	23492	85.5	14.5	8-22
0.075	2456	25948	94.4	5.6	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

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M/s. Civil-Tech Consultants & Engineers
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GRADATION FOR WMM
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Agency : **Mr. Shivakumar K,** Contractor, Bangalore.

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Reference : EE/RRND/Wo. No./232/2013-14 Dated: 07.02.2014

Date of Testing : 16.04.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **27701**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	890	890	3.2	96.8	95-100
22.4	7224	8114	29.3	70.7	60-80
11.2	5265	13379	48.3	51.7	40-60
4.75	4059	17438	63.0	37.0	25-40
2.36	3698	21136	76.3	23.7	15-30
0.600	2461	23597	85.2	14.8	8-22
0.075	2579	26176	94.5	5.5	0-8

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16.04.2016

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Yeshwanthapura Sub Division, BBMP, Bangalore.

Agency : **Mr. Shivakumar K,** Contractor, Bangalore.

Name of Work : Providing and laying HDPE Water line In Mutyala Nagar Block-4 in J.P Park, Ward No. 17, BBMP, Bangalore.

Reference : EE/RRND/Wo. No./232/2013-14 Dated: 07.02.2014

Date of Testing : 16.04.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): 27711

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	891	891	3.2	96.8	95-100
22.4	7225	8116	29.3	70.7	60-80
11.2	5269	13385	48.3	51.7	40-60
4.75	4060	17445	63.0	37.0	25-40
2.36	3699	21144	76.3	23.7	15-30
0.600	2462	23606	85.2	14.8	8-22
0.075	2580	26186	94.5	5.5	0-8

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Job No.: CTCE/BBMP/WNo.17/SKK/WMM/AIV/2014-15

16.04.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Yeshwanthapura Sub Division, BBMP, Bangalore.
Agency	**Mr. Shivakumar K,** Contractor, Bangalore.
Name of the Work	Providing and laying HDPE Water line In Mutyala Nagar Block-4 in J.P Park, Ward No. 17, BBMP, Bangalore.
Reference	EE/RRND/Wo. No./232/2013-14 Dated: 07.02.2014
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	16.04.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	391	392	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	86	88	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	315	312	
4	Aggregate Impact value = percent fines	21.99	22.45	
	100* (W_2/W_1)%			22.22

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

Note:

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